

# PHYSICAL SERVICES SECTOR

*Strategic Framework*

## Vision

The Physical Services departments are a cohesive team of proud and empowered employees working collectively to continuously improve the quality of public services

## Mission

The Physical Services sector is a grouping of interrelated departments providing responsive services to plan, build, operate and maintain a safe and efficient infrastructure and a health environment. These services enhance the economic well being and quality of life in the community.

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# DEPARTMENT OF AVIATION

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## HIGHLIGHTS OF CAPITAL PROGRAM

- Information System Upgrade
  - Taxiway P Construction
  - Terminal Improvements
  - Master Plan Update
  - Aviation Support Center
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**The Department of Aviation** administers the Greater Rochester International Airport, a County-operated international airport, one of the busiest commercial air facilities in New York State. The airport was leased to the Monroe County Airport Authority in 1989. The lease provided that all revenue generated by various operations at the airport would remain with the Airport Authority. The Authority contracted with the County to perform the functions previously handled by the County and the County Legislature continued its role in the awarding of contracts related to activities at the field. As agent for the Authority, County personnel continue to perform direct services such as building and field maintenance, security and emergency response. These services by the County include the leasing of land and terminal space to the airlines, concessionaires and other parties.

### Status of Previously Programmed Projects

Projects completed in 2010:

- Construction of terminal improvements in Concourse B was completed in 2010.
- Phase 2 of construction of the new baggage screening system and new Airline Baggage makeup areas was completed in 2010.
- Taxiway A from the Runway 4 threshold to Taxiway A-1 constructed in 2010.
- Taxiway B from Taxiway C to Taxiway F and the extension of Taxiway B to the new Runway Threshold was constructed.
- Runway 28 Extension construction contract was awarded and the 600 foot extension will be constructed in 2011.
- Construction of Terminal Improvements that include Passenger Circulation Areas is in the design phase and is scheduled for completion in 2011.



- Environmental Compliance program has been advanced and utilizes consultant services to comply with current regulations.
- Design of future phases of the Runway 10-28 rehabilitation, including the intersection with Runway 4-22 was progressed for future construction.
- Design of Taxiway C Extension was progressed for future construction.
- Design of the intersection of Taxiway D and Taxiway E was progressed for future construction

All projects were funded with Federal Aviation Administration Grants (95% of eligible Costs) and New York State Department of Transportation Grants (2.5% of eligible costs), Passenger Facility Charges (PFC's) or Special Revenue (100% of eligible costs).

**DEPARTMENT OF AVIATION - 2012-2017**

PROJECT NAME	Budget	ANNUAL		PROJECT	COST		Total Cost 6 Years
	2012	2013	2014	2015	2016	2017	
<i>Information Systems Upgrade</i> e	750,000	500,000					1,250,000
<i>Taxiway P Construction</i> e	50,000						50,000
s	50,000						50,000
f	1,900,000						1,900,000
total	2,000,000	0	0	0	0	0	2,000,000
Terminal Improvements e	37,500		50,000		37,500		125,000
s	37,500		50,000		37,500		125,000
f	1,425,000		1,900,000		1,425,000		4,750,000
total	1,500,000	0	2,000,000	0	1,500,000	0	5,000,000
Aviation Support Center e	50,000						50,000
s	50,000						50,000
f	1,900,000						1,900,000
total	2,000,000	0	0	0	0	0	2,000,000
Runway 4/22 and Taxiway Improvements e	12,500			100,000	75,000		187,500
s	12,500			100,000	75,000		187,500
f	475,000			3,800,000	2,850,000		7,125,000
total	500,000	0	0	4,000,000	3,000,000	0	7,500,000
Parking Facility Upgrades e	2,000,000			1,000,000			3,000,000
Master Plan Update e	16,250					16,250	32,500
s	16,250					16,250	32,500
f	617,500					617,500	1,235,000
total	650,000	0	0	0	0	650,000	1,300,000
Alternative Energy e	500,000	500,000				500,000	1,500,000
s	500,000	500,000				500,000	1,500,000
total	1,000,000	1,000,000	0	0	0	1,000,000	3,000,000
General Aviation Apron Rehabilitation e	5,000	5,000	5,000			5,000	20,000
s	5,000	5,000	5,000			5,000	20,000
f	190,000	190,000	190,000			190,000	760,000
total	200,000	200,000	200,000	0	0	200,000	800,000
Rehabilitate Taxiway "H" e	37,500	37,500					75,000
s	37,500	37,500					75,000
f	1,425,000	1,425,000					2,850,000
total	1,500,000	1,500,000	0	0	0	0	3,000,000
Heavy Equipment e	25,000		25,000			25,000	75,000
s	25,000		25,000			25,000	75,000
f	950,000		950,000			950,000	2,850,000
total	1,000,000	0	1,000,000	0	0	1,000,000	3,000,000
EMAS System Improvements e		50,000					50,000
s		50,000					50,000
f		1,900,000					1,900,000
total	0	2,000,000	0	0	0	0	2,000,000
North Ramp Improvements e		50,000			75,000	75,000	200,000
s		50,000			75,000	75,000	200,000
f		1,900,000			2,850,000	2,850,000	7,600,000
total	0	2,000,000	0	0	3,000,000	3,000,000	8,000,000
Voluntary Airport Low Emissions (VALE) Program e		5,000					5,000
s		5,000					5,000
f		200,000					200,000
total	0	210,000	0	0	0	0	210,000
Planning and Design Projects e		6,250		6,250			12,500
s		6,250		6,250			12,500
f		237,500		237,500			475,000
total	0	250,000	0	250,000	0	0	500,000
Rehabilitate Taxiways A1, A3, and N e		25,000					25,000
s		25,000					25,000
f		1,000,000					1,000,000
total	0	1,050,000	0	0	0	0	1,050,000

Federal funds share includes both Airport Improvement Program and Passenger Facility Charge funds.  
Italics denotes a new project

DEPARTMENT OF AVIATION - 2012-2017

PROJECT NAME		Budget	ANNUAL			PROJECT	COST		Total Cost 6 Years
		2012	2013	2014	2015	2016	2017		
Airfield Lighting Upgrade	e		25,000					25,000	50,000
	s		25,000					25,000	50,000
	f		950,000					950,000	1,900,000
	total	0	1,000,000	0	0	0	0	1,000,000	2,000,000
Perimeter Service Road	e		15,000						15,000
	s		15,000						15,000
	f		500,000						500,000
	total	0	530,000	0	0	0	0	0	530,000
Airfield Drainage Improvements	e		37,500						37,500
	s		37,500						37,500
	f		1,425,000						1,425,000
	total	0	1,500,000	0	0	0	0	0	1,500,000
Property Acquisition	e		12,500						12,500
	s		12,500						12,500
	f		475,000						475,000
	total	0	500,000	0	0	0	0	0	500,000
Environmental Compliance Projects	e		12,500						12,500
	s		12,500						12,500
	f		475,000						475,000
	total	0	500,000	0	0	0	0	0	500,000
Refurbish of Passenger Loading Bridges	e		18,750		18,750	37,500	37,500		112,500
	s		18,750		18,750	37,500	37,500		112,500
	f		712,500		712,500	1,425,000	1,425,000		4,275,000
	total	0	750,000	0	750,000	1,500,000	1,500,000		4,500,000
West Taxiway - Runway 4/22	e			75,000		62,500			137,500
	s			75,000		62,500			137,500
	f			2,850,000		2,375,000			5,225,000
	total	0	0	3,000,000	0	2,500,000	0	0	5,500,000
Black Creek Culvert Extension	e			25,000	75,000				100,000
	s			25,000	75,000				100,000
	f			950,000	2,850,000				3,800,000
	total	0	0	1,000,000	3,000,000	0	0	0	4,000,000
Taxiway "A" Improvements	e			62,500					62,500
	s			62,500					62,500
	f			2,375,000					2,375,000
	total	0	0	2,500,000	0	0	0	0	2,500,000
Runway 10/28 and Taxiway E	e			100,000					100,000
	s			100,000					100,000
	f			3,800,000					3,800,000
	total	0	0	4,000,000	0	0	0	0	4,000,000
Viaduct Rehabilitation	e				50,000				50,000
	s				50,000				50,000
	f				1,900,000				1,900,000
	total	0	0	0	2,000,000	0	0	0	2,000,000
Access/Circulation Roadway	e				2,000,000				2,000,000
Terminal South Apron, "C" Expansion	e					50,000			50,000
	s					50,000			50,000
	f					1,900,000			1,900,000
	total	0	0	0	0	2,000,000	0	0	2,000,000
South Taxiway-Runway 10/28	e						100,000		100,000
	s						100,000		100,000
	f						3,800,000		3,800,000
	total	0	0	0	0	0	4,000,000	0	4,000,000
Taxiway "D" Extension	e						37,500		37,500
	s						37,500		37,500
	f						1,425,000		1,425,000
	total	0	0	0	0	0	1,500,000	0	1,500,000
e = enterprise fund	e	3,483,750	1,300,000	342,500	3,250,000	337,500	821,250		9,535,000
s = state funds	s	733,750	800,000	342,500	250,000	337,500	821,250		3,285,000
f = federal funds	f	8,882,500	11,390,000	13,015,000	9,500,000	12,825,000	12,207,500		67,820,000
<b>TOTAL</b>		<b>13,100,000</b>	<b>13,490,000</b>	<b>13,700,000</b>	<b>13,000,000</b>	<b>13,500,000</b>	<b>13,850,000</b>		<b>80,640,000</b>

Federal funds share includes both Airport Improvement Program and Passenger Facility Charge funds.

Italics denotes a new project

## Information Systems Upgrade

**Project Description:** This project provides funds for the replacement of critical airport information system components that have exhausted their useful life or become obsolete and are no longer supported by maintenance agreement or unit replacement in kind. Systems providing service for passenger information, security, paging, and operations are required to be upgraded both software and hardware to maintain the level of service required by the FAA, TSA, law enforcement, and passengers. This project is beyond the scope of computer and telecommunication services provided to Monroe County by Upstate Telecommunications Corporation LDC, a not-for-profit local development corporation.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	5 years
Annual Debt Service Payment:	\$296,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$296,700</u>
Net Operating Budget Impact:	\$ 0

## Taxiway P Construction

**Project Description:** This project includes improvement of Runway 10/28, with a new south entry taxiway to the threshold. This new 600' taxiway will be identified as Taxiway P. Taxiway "P" will be renamed Taxiway H when the south taxiway runway 10/28 is completed.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$6,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$6,800</u>
Net Operating Budget Impact:	\$ 0

## Terminal Improvements

**Project Description:** This project involves the construction of new walls, corridors, vertical circulation for pedestrians and building renovations to support both improved circulation and provide additional leased space for airline usage. The Airport has identified the need to alter the existing pedestrian circulation patterns to better address customer needs for services within the constraints of airport security requirements. It is also anticipated that the expansion of services with low fare and regional carriers will require the renovation of the concourse function to provide the required leased areas.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$17,000
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$17,000</u>
Net Operating Budget Impact:	\$ 0

## Aviation Support Complex

**Project Description:** This project will provide vehicles and equipment that are used to provide aircraft support services a facility for parking and protection from weather. The spaces that had provided protection for this equipment have been reconfigured for baggage screening and no longer have available space for support equipment. The project will include demolition of existing buildings, construction of new buildings, and rehabilitation and reconstruction of interior spaces as needed within existing structures on the east terminal apron area. This project will provide weather protection for Airline ground support equipment and make available alternative space to protect the equipment from freezing temperatures.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	5 years
Annual Debt Service Payment:	\$11,900
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$11,900</u>
Net Operating Budget Impact:	\$ 0

## Runway 4/22 and Taxiway Improvements

**Project Description:** This project improves the existing runway pavement and will include an extension of Runway 4 and parallel Taxiway "A" at the south end of the airfield. The relocation of several existing navigation aids and lighting systems will be required. The project will include milling and resurfacing the existing runway pavement, new asphalt pavement, new concrete pavement, drainage systems, lighting, marking and related work to construct the runway improvements. The resulting improvements will provide safer aircraft landing and take off as well as facilitate the utilization of a more diverse aircraft type at GRIA. This project will require a multi year planning process.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$25,500
Annual Operating Costs:	\$ 5,000
Attributable Revenues:	<u>\$30,500</u>
Net Operating Budget Impact:	\$ 0

## Parking Facility Upgrades

**Project Description:** This project will result in the upgrading of existing surface areas and related support facilities as well as required structural upgrades to existing airport parking facilities. Installation of another vertical circulation ramp and replacement of the revenue control system are projected. The parking garage and related facilities construction (for the terminal) began in 1989. Parking garages require periodic major maintenance projects to maintain the integrity of the structure and extend the useful life at a minimal cost. Surface parking lots need periodic maintenance to maintain their condition.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$407,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$407,600</u>
Net Operating Budget Impact:	\$ 0

## Master Plan Update

**Project Description:** This project will update the current Airport Master Plan to reflect needed improvements in the next 20 years. The FAA requires updated long range planning for airport facilities to remain eligible for federal funding for airport improvements. The plan will include analysis of runway and taxiway configurations for future activity at the airport, projecting capital improvement requirements over a 20 year period, and assessing the need for expansion of airport property for both safety and aviation needs.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$4,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$4,400</u>
Net Operating Budget Impact:	\$ 0

## Alternative Energy

**Project Description:** This project will provide further implementation of energy conservation and generation measures at the Airport complex. The sequence of this project following the current energy projects will provide a period to evaluate the performance of current green energy initiatives that have been undertaken and make performance based decisions on how to best continue reducing the Airport's energy consumption. This project includes the design and construction of renewable energy improvements to supply power for building consumption. Solar panels (photo voltaic) as well as wind turbine power generation will be utilized to offset power purchase from the utility company.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$203,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$203,800</u>
Net Operating Budget Impact:	\$ 0

## General Aviation Apron Rehabilitation

**Project Description:** This project rehabilitates and reconstructs the existing aircraft aprons on the south side of the airfield and will include pavement, drainage improvements, electrical improvements and pavement markings. The configuration of pavement in this area of the airport has evolved by combining former runways, taxiways, aircraft parking and vehicle parking lots. These paved areas need to be reconfigured to improve safety for both aircraft and vehicle movements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$2,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$2,700</u>
Net Operating Budget Impact:	\$ 0

## Rehabilitate Taxiway 'H'

**Project Description:** This project will rehabilitate and reconstruct portions of Taxiway "H" from Taxiway "D" north to the north ramp to include new rigid and flexible pavement, miscellaneous drainage and electrical improvements and pavement markings. This will improve one of the older taxiways on the airport, thus avoiding possible pavement failure and resulting delays in service.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$10,200
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$10,200</u>
Net Operating Budget Impact:	\$ 0

## Heavy Equipment

**Project Description:** This project will provide for the purchase of replacement equipment to be used for airport field maintenance and safety operations such as runway maintenance, snow removal, ice control and fire fighting and rescue. This scheduled and planned heavy equipment replacement program allows the Airport's airfield to remain operational and functional year round in all types of weather and conditions.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$10,200
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$10,200</u>
Net Operating Budget Impact:	\$ 0

## EMAS System Improvements

**Project Description:** This project rehabilitates the Engineered Material Arresting System (EMAS) located in the Runway 28 Overrun at the west end of runway 10-28. This product provides for the deceleration of aircraft that were unable to stop on the runway during their operations. The design aircraft and runway geometry has changed since the system was installed in 2001.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	30 years
Annual Debt Service Payment:	\$3,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$3,600</u>
Net Operating Budget Impact:	\$ 0

## North Ramp Improvements

**Project Description:** This project will rehabilitate existing concrete and asphalt aircraft parking aprons at the terminal. The project will extend the useful life of the existing pavement by replacing existing concrete slabs that have or are failing; and, rehabilitate concrete slabs with localized damage areas. This will minimize the disruption to the airline operations at the terminal that would result if areas of the pavement were allowed to fail and total reconstruction was required. This work is identified in the pavement management study for the airport.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$27,200
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$27,200</u>
Net Operating Budget Impact:	\$ 0

## Voluntary Airport Low Emissions (VALE)

**Project Description:** This project will provide vehicles that are powered by Compressed Natural Gas (CNG) under the parameters defined in the Airport Improvement Program (AIP). The project will also expand the existing Compressed Natural Gas facility by providing a second dispensing station.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	5 years
Annual Debt Service Payment:	\$1,200
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$1,200</u>
Net Operating Budget Impact:	\$ 0

## Planning and Design Projects

**Project Description:** Planning and design activities related to future aviation projects which are eligible for Federal AIP funding. The current FAA procedure places more emphases on the Airport being able to progress an aided project. Projects which are designed and ready to construct are the best demonstration that the project is ready to progress.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	5 years
Annual Debt Service Payment:	\$3,000
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$3,000</u>
Net Operating Budget Impact:	\$ 0

## Rehabilitate Taxiways A1, A3, and N

**Project Description:** This project rehabilitates three of the existing exit taxiways from Runway 4-22, the primary Airport runway. Taxiways A-3 and A-4 were constructed in the 1960's and require major structural rehabilitation to the existing asphalt pavement. Taxiway A-1 will be reviewed for conformance to current design standards for pavement width and it is proposed that the concrete pavement be rehabilitated, and widened should this be required to meet standards. Work on both Taxiways will include drainage, lighting, signage, and markings.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$3,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$3,400</u>
Net Operating Budget Impact:	\$ 0

## Airfield Lighting Upgrade

**Project Description:** This project provides funding for upgrading critical components of the airfield lighting system. While some components of the system have been updated when airfield improvements have been implemented, a complete overall system update is required. Lights, wiring, switches and other component parts may need replacement or reconditioning. The work will also include replacement of the back up generator that powers the lighting system during electric grid failures.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$6,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$6,800</u>
Net Operating Budget Impact:	\$ 0

## Perimeter Service Road

**Project Description:** This project will upgrade existing gravel roadways within the Airport security fence to allow vehicles to move more efficiently around the airfield independent of aircraft operations. Construction of asphalt surfaces on the service roadways in the southern portion of the Airport will allow improved operations by the Airport.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$2,000
Annual Operating Costs:	\$1,200
Attributable Revenues:	<u>\$3,200</u>
Net Operating Budget Impact:	\$ 0

## Airfield Drainage Improvements

**Project Description:** This project provides funding to upgrade and expand the existing storm drainage system for the airport. The program will include replacement of portions of existing systems and supplemental outfall piping to provide the required system capacity.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$5,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$5,100</u>
Net Operating Budget Impact:	\$ 0

## Property Acquisition

**Project Description:** This project will provide funds to acquire property around the Airport for safety, compatibility and control of future development at the airport. Identification of these properties is included in the Airport Master Plan Update.

**Environmental Review:** This project is an Unlisted Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$1,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$1,700</u>
Net Operating Budget Impact:	\$ 0

## Environmental Compliance Projects

**Project Description:** This project will include various environmental improvements at the airport including improvements to existing storm water quality discharges, upgrade of existing chemical storage areas, automation of deicing fluid collection systems for remote operations, contaminated site investigation and remediation, and wetland mitigation. This project will enable the airport to comply with federal and state environmental regulations.

**Environmental Review:** This project is an Unlisted Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$1,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$1,700</u>
Net Operating Budget Impact:	\$ 0

## Refurbish of Passenger Loading Bridges

**Project Description:** This project will provide for the refurbishment of existing jet way loading bridges. This scheduled and planned refurbishment program will continue the useful life of this important equipment. Existing loading bridges are the original equipment installed when the airport was constructed in its current configuration. Annual maintenance on this equipment is exceeding the ability to be supported by the operating budget as the equipment continues to age and require more significant maintenance and component replacement.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$15,300
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$15,300</u>
Net Operating Budget Impact:	\$ 0

## West Taxiway - Runway 4/22

**Project Description:** This project will create a new north/south taxiway for Runway 4/22, west of the runway between the Runway 4 threshold and Taxiway E extended. The Airport Master Plan Update identifies the need to improve the operational characteristics of the North/South runway to improve aircraft circulation west of the runway.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$18,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$18,700</u>
Net Operating Budget Impact:	\$ 0

## Black Creek Culvert Extension

**Project Description:** This project will extend the culvert carrying Little Black Creek on the west side of Runway 4/22. This project will include drainage systems and related work to construct the culverts. This project will improve the water quality of Little Black Creek and allow for the future construction of the planned parallel taxiway west of Runway 4/22.

**Environmental Review:** This project is an Unlisted Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$13,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$13,600</u>
Net Operating Budget Impact:	\$ 0

## Taxiway 'A' Improvements

**Project Description:** The project provides for the reconstruction of Taxiway A from Taxiway A to Taxiway A-3. The project will include necessary improvements at the intersecting taxiways and the Taxiway A hold apron. The work will include new rigid pavement, miscellaneous drainage improvements, electrical lighting circuit and runway guard light improvements and installation of appropriate pavement markings for the taxiway configuration. This project also provides for localized concrete pavement rehabilitation to extend the useful life of the pavement in areas not programmed for reconstruction, as recommended in the Pavement Management Study.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$8,500
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$8,500</u>
Net Operating Budget Impact:	\$ 0

## Runway 10/28 and Taxiway E

**Project Description:** This project will provide for improved aircraft access from the south to the Runway 10 threshold. The cross field Taxiway E will be extended west from Runway 4/22 and then continue north to Runway 10/28. Provides improved access and the project is recommended in the Airport Layout Plan.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$13,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$13,600</u>
Net Operating Budget Impact:	\$ 0

## Viaduct Rehabilitation

**Project Description:** This project provides funds for the rehabilitation of the Viaduct, the elevated roadway that traverses the front of the Passenger Terminal. The work will include replacement of the concrete deck that is supported by a pre-cast plank system, remedial work as required on existing piers and columns and related work necessary to maintain the structural integrity of the Viaduct.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$6,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$6,800</u>
Net Operating Budget Impact:	\$ 0

## Access/Circulation Roadway

**Project Description:** This project will upgrade the airport circulation roadway network that was constructed in the 1980's to support terminal improvements. The project includes surface rehabilitation, drainage system improvements, curbing and pavement marking for landside roadways that connect the terminal to Brooks Avenue and Scottsville Road.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$271,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$271,700</u>
Net Operating Budget Impact:	\$ 0

## Terminal South Apron, "C" Expansion

**Project Description:** This project involves expansion of the terminal apron and relocation of taxiway "C." The apron expansion would provide approximately eight acres of new pavement. The existing apron grading enables "at gate" aircraft deicing and deicing fluid collection; therefore, the expansion would also necessitate re-grading/reconstruction of the existing apron to fully maintain this capability. The work will include new concrete pavement, drainage systems, lighting, marking and related work to complete this expansion. Terminal apron expansion will allow for future terminal concourse expansion and provide needed additional aircraft parking. Relocation of Taxiway "C" will be required by the expansion for safe and more efficient aircraft movement.

**Environmental Review:** This project is an Unlisted Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$6,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$6,800</u>
Net Operating Budget Impact:	\$ 0

## South Taxiway - Runway 10/28

**Project Description:** This project will create new segments of east/west taxiway for Runway 10/28, south of the runway, including upgrading of the intersected pavements at Taxiway H and Taxiway F, and connection to the runway threshold east of Taxiway F. This project will also include relocation of FAA owned navigation facilities.

**Environmental Review:** This project is an Unlisted Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$13,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$13,600</u>
Net Operating Budget Impact:	\$ 0

## Taxiway "D" Extension

**Project Description:** This project extends Taxiway D from Taxiway F south to the development parcel located east of the existing Air Traffic Control Tower. The project will include asphalt pavement, drainage improvements, electrical system upgrades and new pavement markings. Modifications to the existing airport roadway and utility grid in the vicinity of Hangar #2 will be required.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$5,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$5,100</u>
Net Operating Budget Impact:	\$ 0

# DEPARTMENT OF ENVIRONMENTAL SERVICES

## DIVISION OF PURE WATERS

### HIGHLIGHTS OF CAPITAL PROGRAM

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- Continuation of upgrades and replacement of major process equipment at the Frank E. Van Lare Wastewater Treatment Plant (FEV WWTP) consisting of improvements to the overall electrical system, aeration basins, and primary tanks in combination with collection system improvement initiatives for pump stations and sewers including CSOAP infrastructure in the Rochester Pure Waters District (RPWD).
  - Continuation of comprehensive improvements to address hydraulic capacities and extend the useful life of the interceptor system and upgrades to pump stations in the Irondequoit Bay South Central Pure Waters District (IBSCPWD).
  - Continuation of comprehensive improvements to address hydraulic capacities and extend the useful life of the interceptor system and upgrades to pump stations in the Northwest Quadrant Pure Waters District (NWQPWD).
  - Continuation of collection system improvement initiatives for pump stations and sewers in the Gates-Chili-Ogden Sewer District (GCOSD).
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The Division of Pure Waters was established by the County Legislature to implement the Pure Waters Master Plan to reduce the levels of pollution of Irondequoit Bay, the Genesee River, areas of Lake Ontario, and other waters of Monroe County to safe, healthy levels. It operates and maintains four geographic districts containing two wastewater treatment facilities, 55 pump stations, 1000 miles of collection system sewers, 115 miles of interceptor / trunk sewers and 38 miles of conveyance / storage deep tunnels.

The various staff of the four Pure Waters Districts work cooperatively together to maximize operational effectiveness and enhance cost efficiencies. The County's two wastewater treatment plants treat an average of 130 million gallons of water per day through physical, biological, and chemical processes. The Field Operations Section is responsible for the operation and maintenance of 700 miles of sewers in the City and 300 miles of sanitary sewers in the Gates-Chili-Ogden District. This section is also responsible for the operation of 55 pump stations and the Combined Sewer Overflow Abatement Program (CSOAP) Tunnel System, which dramatically reduces storm generated overflows to the river, bay and lake through improved overflow capture and treatment rates. The Industrial Waste Pretreatment Section administers a federally approved pretreatment program, the sampling and analysis of discharges from 150 industrial facilities and enforcement of the Monroe County Sewer Use Law.

The County Legislature, which serves as the Pure Waters



Administrative Board, oversees program management, approves contracts, holds public hearings, and establishes the annual rates and operating budgets for the four districts.

Engineering services, including project design and construction administration, are generally provided by the Monroe County Division of Engineering and Facilities Management, either directly, or through contractual services with consultants and other outside vendors.

### Status of Previous Programmed Projects

In the **Rochester Pure Waters District** design of upgrades to the FEV WWTP aeration system continued in 2010. Construction of Phase I will begin in 2011, with additional phases continuing through 2013. Construction of upgrades to the Clinton Keeler Pump Station, Phase I of the FEV WWTP Thickener Tank Improvements and selective demolition of wastewater facilities were completed in 2010. Various rehabilitation and replacement projects in the collection system were also completed in 2010 and others will continue annually in 2011 and beyond.

In the **Irondequoit Bay South Central Pure Waters District** construction of improvements to the McEwen Pump Station were completed in 2010. Design of upgrades to the Irondequoit Bay Pump Station force mains and Pinnacle Road Pump Station continued in 2010, with construction scheduled to begin in 2011.

In the **Northwest Quadrant Pure Waters District**, design of a third, secondary clarifier to increase hydraulic capacities of the NWQ WWTP continued in 2010, with construction scheduled to begin in 2011. General improvements to the pump stations and interceptor system will continue in 2011 and beyond.

In the **Gates Chili Ogden Sewer District** construction of upgrades to the Trolley Pump Station began in 2010 with completion scheduled in 2011. Planning and design of upgrades for the Central Gates, Southwest and Scottsville Road Pump Stations continued in 2010 with construction scheduled to begin in 2012 and beyond.

**PURE WATERS - 2012-2017**

PROJECT NAME	Budget	ANNUAL PROJECT COST			COST		Total Cost 6 Years
	2012	2013	2014	2015	2016	2017	
<b>Rochester Pure Waters District</b>							
Frank E. VanLare Aeration System Improvements d	4,000,000						4,000,000
Frank E. VanLare Primary Tank Improvements d	2,500,000						2,500,000
Combined System Tunnel System Improvements d	1,000,000	3,000,000					4,000,000
Combined System Pedestrian Bridge Improvements d		1,000,000					1,000,000
Lake & Merrill Pump Station Improvements d			1,000,000				1,000,000
Frank E. VanLare General Improvements d				500,000	500,000	500,000	1,500,000
General Collection System Improvements d				500,000	500,000	500,000	1,500,000
Frank E. VanLare Thickener Improvements Phase II d					1,500,000	1,500,000	3,000,000
<i>Frank E. VanLare Maintenance Center</i> d						750,000	750,000
<i>SCADA System Upgrades</i> d						500,000	500,000
District Subtotal d	7,500,000	4,000,000	1,000,000	1,000,000	2,500,000	3,750,000	19,750,000
<b>Irondequoit Bay S. Central Pure Waters District</b>							
General Pump Station & Interceptor Improvements d	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
South Central Trunk Sewer Improvements d	1,000,000						1,000,000
District Subtotal d	1,500,000	500,000	500,000	500,000	500,000	500,000	4,000,000
<b>North West Quadrant Pure Waters District</b>							
General Pump Station & Interceptor Improvements d	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
District Subtotal d	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
<b>Gates Chili Ogden Pure Waters District</b>							
General Collection System Improvements d	500,000	750,000	750,000	500,000	250,000	250,000	3,000,000
Central Gates Pump Station Improvements d	2,500,000						2,500,000
Southwest Pump Station Improvements d			2,000,000				2,000,000
Scottsville Road Pump Station Improvements d					1,500,000		1,500,000
District Subtotal d	3,000,000	750,000	2,750,000	500,000	1,750,000	250,000	9,000,000
<b>TOTAL</b> d	<b>12,500,000</b>	<b>5,750,000</b>	<b>4,750,000</b>	<b>2,500,000</b>	<b>5,250,000</b>	<b>5,000,000</b>	<b>35,750,000</b>

Italics denotes a new project

## RPWD - FEV WWTP Aeration System Improvements

**Project Description:** This project includes multi-year, phased replacement of the aeration system, a critical component of the overall treatment process and the largest energy consuming system at the plant.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 348,700
Annual Operating Costs:	\$ -225,000
Attributable Revenues:	<u>\$ 123,700</u>
Net Operating Budget Impact:	\$ 0

## RPWD - FEV WWTP Primary Tank Improvements

**Project Description:** This project includes structural improvements to the primary tanks in combination with mechanical and electrical upgrades necessary to support the critical process of primary treatment.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$218,000
Annual Operating Costs:	\$ -50,000
Attributable Revenues:	<u>\$168,000</u>
Net Operating Budget Impact:	\$ 0

## RPWD - CSOAP Tunnel System Improvements

**Project Description:** This project includes a comprehensive evaluation of and improvements to Pure Waters' Combined Sewer Overflow Abatement Program (CSOAP) Tunnel System including, but not limited to, the Tiger-Carlisle/Dewey-Eastman and Lexington Avenue Tunnels. Improvements will include grit and debris removal to restore hydraulic capacity and structural rehabilitation to ensure physical integrity throughout the Tunnel System.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 348,700
Annual Operating Costs:	\$ -15,000
Attributable Revenues:	<u>\$ 333,700</u>
Net Operating Budget Impact:	\$ 0

## RPWD - CSOAP Pedestrian Bridge Improvements

**Project Description:** This project consists of a comprehensive structural rehabilitation of the Maplewood Pedestrian Bridge access pathways.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 87,200
Annual Operating Costs:	\$ -10,000
Attributable Revenues:	<u>\$ 77,200</u>
Net Operating Budget Impact:	\$ 0

## RPWD - Lake & Merrill Pump Station Improvements

**Project Description:** This project includes major mechanical, electrical and structural improvements to the District's Lake and Merrill Pump Station.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 87,200
Annual Operating Costs:	\$ -15,000
Attributable Revenues:	<u>\$ 72,200</u>
Net Operating Budget Impact:	\$ 0

## RPWD - FEV WWTP General Improvements

**Project Description:** This project generally includes various smaller scale improvements at the FEV WWTP, which are internally managed and integral to the Department's "Five Year Plan" operation and maintenance program which generates repair and replacement priorities that may not be part of larger and long term planned initiatives.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$130,800
Annual Operating Costs:	\$ -10,000
Attributable Revenues:	<u>\$120,800</u>
Net Operating Budget Impact:	\$ 0

## RPWD - General Collection System Improvements

**Project Description:** This project generally includes various smaller scale collection system improvements, which are internally managed and consistent with the Department's "Five Year Plan" operation and maintenance program which generates repair and replacement priorities that may not be part of larger and long term planned initiatives.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$130,800
Annual Operating Costs:	\$ -25,000
Attributable Revenues:	<u>\$105,800</u>
Net Operating Budget Impact:	\$ 0

## RPWD - FEV WWTP Thickener Improvements - Phase II

**Project Description:** This project includes mechanical improvements to the thickener tanks in combination with structural and electrical upgrades necessary to support the critical process of solids handling. The RPWD recently completed Phase I of the thickener improvements. Phase II is necessary to complete the entire complex.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$261,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$261,600</u>
Net Operating Budget Impact:	\$ 0

## RPWD - FEV Maintenance Center

**Project Description:** This project includes planning, design and construction of a new building to accommodate plant administration, maintenance and warehouse functions. Existing spaces are overcrowded, antiquated and physically separated. A new consolidated space will provide needed facilities and improved functionality and efficiencies.

**Environmental Review:** This project is an Unlisted Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$65,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$65,400</u>
Net Operating Budget Impact:	\$ 0

## RPWD - SCADA System Upgrades

**Project Description:** This project involves upgrading Supervisory Control and Data Acquisition (SCADA) systems for monitoring and control of wastewater collection and treatment infrastructure. This project is beyond the scope of computer and telecommunication services provided to Monroe County by Upstate Telecommunications Corporation LDC, a not-for-profit local development corporation.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$43,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$43,600</u>
Net Operating Budget Impact:	\$ 0

## IBSCPWD - General Pump Station & Interceptor Improvements

**Project Description:** This project includes general improvements to various pump stations and interceptors in the District. Improvements include a phased rehabilitation of the Irondequoit Bay Pump Station's two major force mains that convey District flows to the FEV WWTP; trunk sewer improvements necessary to increase conveyance capacities in the southwest quadrant of the District, and District-wide enhancements to the appurtenant communication and data transmission systems. A major component for all facility improvements is an emphasis on energy efficiencies and cost savings that will provide a partial offset to debt service incurred.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$261,600
Annual Operating Costs:	\$ -25,000
Attributable Revenues:	<u>\$236,600</u>
Net Operating Budget Impact:	\$ 0

## IBSCPWD - South Central Trunk Sewer Improvements

**Project Description:** This project includes repair, replacement and rehabilitation measures necessary to increase conveyance capacities and maintain structural integrity of the District's South Central Trunk Sewer.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 87,200
Annual Operating Costs:	\$-25,000
Attributable Revenues:	<u>\$ 62,200</u>
Net Operating Budget Impact:	\$ 0

## NWQPWD - General Pump Station & Interceptor Improvements

**Project Description:** This project includes general improvements to various pump stations and interceptors in the District. Improvements include increases in conveyance capacity of localized sections of the District's interceptors; facility upgrades necessary to more effectively maximize flow distribution and capacities between the District and the Gates-Chili-Ogden Sewer District; and District-wide enhancements to the appurtenant communication and data transmission systems. A major component for all facility improvements is an emphasis on energy efficiencies and cost savings that will provide a partial offset to debt service incurred.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$261,600
Annual Operating Costs:	\$ -25,000
Attributable Revenues:	<u>\$236,600</u>
Net Operating Budget Impact:	\$ 0

## GCOSD - General Collection System Improvements

**Project Description:** This project includes general improvements to various pump stations and collection system infrastructure in the District. Improvements will serve to extend the useful life of various facilities, while also providing increased conveyance capacity and enhanced operational flexibility and District-wide enhancements to the appurtenant communication and data transmission systems. A major component for all facility improvements is an emphasis on energy efficiencies and cost savings that will provide a partial offset to debt service incurred.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$261,600
Annual Operating Costs:	\$ -20,000
Attributable Revenues:	<u>\$241,600</u>
Net Operating Budget Impact:	\$ 0

## GCOSD - Central Gates Pump Station Improvements

**Project Description:** This project includes major mechanical, electrical and structural improvements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$218,000
Annual Operating Costs:	\$ -15,000
Attributable Revenues:	<u>\$203,000</u>
Net Operating Budget Impact:	\$ 0

## GCOSD - Southwest Pump Station Improvements

**Project Description:** This project includes major mechanical, electrical and structural improvements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$174,400
Annual Operating Costs:	\$ -15,000
Attributable Revenues:	<u>\$159,400</u>
Net Operating Budget Impact:	\$ 0

## GCOSD - Scottsville Road Pump Station Improvements

**Project Description:** This project includes major mechanical, electrical and structural improvements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$130,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$130,800</u>
Net Operating Budget Impact:	\$ 0

# DEPARTMENT OF ENVIRONMENTAL SERVICES FLEET

## HIGHLIGHTS OF CAPITAL PROGRAM

- Purchase of necessary equipment for various department operations

The Division of Fleet was created in the Environmental Services Department in 2003. The purpose of the division is to coordinate the purchase of specialized equipment for a variety of county department operations. Equipment for Parks, Highways and Bridges, and Traffic Engineering are included in this program.



## ENVIRONMENTAL SERVICES FLEET - 2012-2017

PROJECT NAME		Budget	ANNUAL PROJECT COST				Total Cost 6 Years	
		2012	2013	2014	2015	2016		2017
Equipment/Vehicles Parks	c	250,000	145,000	145,000	155,000	155,000	850,000	
Equipment/Vehicles Traffic Engineering	c	170,000	146,000	282,000	523,000	86,000	67,000	1,274,000
Equipment/Vehicles Highways and Bridges	c	168,000	133,000	190,000	125,000	28,000	110,000	754,000
TOTAL	c	588,000	424,000	617,000	803,000	269,000	177,000	2,878,000

### Equipment/Vehicles Parks

**Project Description:** This project involves the purchase of heavy equipment for county parkland maintenance activities. Items to be purchased in each year of the capital program are intended to supplement existing equipment or replace worn and out dated equipment.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	10 years
Annual Debt Service Payment:	\$115,500
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$115,500

### Equipment/Vehicles Highways and Bridges

**Project Description:** This project provides funds for the purchase of heavy equipment used for the maintenance of county highways and bridges. Items to be purchased in each year of the capital program are intended to supplement existing equipment or replace worn and outdated equipment.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	10 years
Annual Debt Service Payment:	\$102,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$102,400

### Equipment/Vehicles Traffic Engineering

**Project Description:** This project provides for the purchase of heavy equipment used for the county's traffic engineering maintenance activities. Items to be purchased in each year of the capital program are to supplement existing equipment or replace worn and outdated equipment.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	10 years
Annual Debt Service Payment:	\$173,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$173,100

# DEPARTMENT OF ENVIRONMENTAL SERVICES GEOGRAPHIC INFORMATION SERVICES DIVISION

## HIGHLIGHTS OF CAPITAL PROGRAM

- Continuation of the implementation of the County's Geographic Information System.

The Division of Geographic Information Services was created in the Environmental Services Department in 2000. The purpose of the division is to continue the development of the County's Geographic Information System by improving computer hardware and software and providing technical services to improve computerized mapping capabilities in County Departments. The program initially involved creating a digital base map using the County's real property tax maps. Building upon this base, additional computerized map layers will be established for County departments wishing to display and analyze their facility information in a geographic manner. Working with other departments, local governments, and state and federal agencies, the Geographic Information Services Division will continue to expand and improve the computerized mapping capabilities in Monroe County.



## GIS (Geographic Information System) Enterprise Development

**Project Description:** This project is a continuation of the County's GIS (Geographic Information System) development. The project revolves around three initiatives: data conversion for the cadastral base map, network infrastructure development, and application development. The cadastral layer will serve as a base map for city and county departments, local towns and villages, private agencies and the public. Network infrastructure development concentrates on the hardware and software improvements necessary to bring GIS technology to a broad audience. Specific improvements are underway that will facilitate the internet, intranet, and extranet community. Application development applies GIS technologies to tasks, projects, or programs in order to perform that task, project, or program more efficiently. This project is beyond the scope of computer and telecommunication services provided to Monroe County by Upstate Telecommunications Corporation LDC, a not-for-profit local development corporation.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	5 years
Annual Debt Service Payment:	\$170,900
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$170,900</u>
Net Operating Budget Impact:	\$ 0

### GEOGRAPHIC INFORMATION SERVICES - 2012-2017

PROJECT NAME	Budget	ANNUAL PROJECT COST			COST		Total Cost 6 Years
	2012	2013	2014	2015	2016	2017	
Geographic Information System Enterprise Development	c			240,000	240,000	240,000	720,000
TOTAL	c	0	0	0	240,000	240,000	240,000

# DEPARTMENT OF ENVIRONMENTAL SERVICES SOLID WASTE

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## HIGHLIGHTS OF CAPITAL PROGRAM

- Composting and recycling initiatives that leverage federal and state grants.
  - Improvements to Resource Recovery Facility and Recycling Center
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Monroe County's Solid Waste Management integrated program is built upon recycling, volume reduction and lastly land burial. Some materials can be recycled, some composted and others must be landfilled. The County's program responds to this diversity of management by redirecting materials from disposal for their reuse and reduction to extend the life of landfills.



### SOLID WASTE - 2012-2017

PROJECT NAME	Budget	ANNUAL PROJECT COST			Total Cost 6 Years		
	2012	2013	2014	2015		2016	2017
Resource Recovery Facility/ Recycling Center Complex Improvements	210,000	500,000	900,000				1,610,000
TOTAL	210,000	500,000	900,000	0	0	0	1,610,000

## Resource Recovery Facility/Recycling Center Complex Improvements

**Project Description:** This project includes security, tipping and storage floor replacement and parking/staging and street milling/paving and drainage and utility upgrades at the Monroe County Resource Recovery Facility (RRF) and Recycling Center. The RRF is 30 years old and is used as a transfer station for City solid waste being hauled to the Mill Seat Landfill. The Recycling Center is nearly 20 years old and receives and processes recyclables to reduce land filled waste from throughout the County. Wear and tear on the infrastructure and the buildings is attributed to the 500 collection vehicles and tractor/trailers within the complex daily and major improvements are now required.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	25 years
Annual Debt Service Payment:	\$125,900
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$125,900</u>
Net Operating Budget Impact:	\$ 0

# DEPARTMENT OF ENVIRONMENTAL SERVICES FACILITIES MANAGEMENT

## HIGHLIGHTS OF CAPITAL PROGRAM

- Installation of energy management systems throughout County-owned buildings for operational savings.
- Upgrade County facilities for structural improvements, electrical improvements, fire protection, roof repairs and HVAC.
- Renovate Monroe County Public Safety Building.
- Upgrade security systems to control unauthorized building access.
- Undertake implementation of corrective measures for ADA compliance.
- Renovate Hall of Justice.



The Division of Engineering and Facilities Management is responsible for the operation and maintenance of County-owned facilities. This includes setting and meeting security and safety objectives for all County buildings and its personnel; developing and administering housekeeping programs that will use worker time more efficiently, achieve savings, and provide building cleaning; and managing energy consumption in County buildings. The four major facilities are the Hall of Justice, the County Office Building, the Health and Human Services Building, and the Civic Center Complex.

## Status of Previously Programmed Projects

The Division of Engineering and Facilities Management continues to maintain County facilities. The Division continues to make improvements to roofs, updates to elevators, accommodations to improve handicapped accessibility, and general improvements to County Buildings.

## ENGINEERING AND FACILITIES MANAGEMENT - 2012-2017

PROJECT NAME		Budget	ANNUAL PROJECT COST					Total Cost 6 Years
		2012	2013	2014	2015	2016	2017	
General Improvements	c	600,000	600,000	600,000	600,000	600,000	600,000	3,600,000
Hall of Justice Court Requested Improvements	c	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
Hall of Justice Reconstruction	c	250,000	2,250,000	250,000	250,000	250,000	250,000	3,500,000
Asbestos Abatement	c	75,000	75,000	75,000	75,000	75,000	75,000	450,000
Civic Center Complex Reconstruction	c	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
Public Safety Building Reconstruction	c	3,000,000				500,000	2,500,000	6,000,000
County Office Building Reconstruction	c	600,000	600,000	600,000	600,000	600,000	600,000	3,600,000
Energy Conservation and Management Systems	c	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Roof Improvements	c	450,000		450,000		450,000		1,350,000
ADA Aid to Disabled Improvements	c		75,000		75,000		75,000	225,000
<b>TOTAL</b>	<b>c</b>	<b>5,875,000</b>	<b>4,500,000</b>	<b>2,875,000</b>	<b>2,500,000</b>	<b>3,375,000</b>	<b>5,000,000</b>	<b>24,125,000</b>

## General Improvements

**Project Description:** This project funds improvements to County Buildings. These changes are designed to improve office productivity, and to make improvements which address health, safety, and code concerns. Included are funds for design and construction of building system upgrades such as mechanical, electrical, plumbing systems, door and window replacements, HVAC, lighting, masonry and structural improvements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	10 years
Annual Debt Service Payment:	\$342,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$181,200</u>
Net Operating Budget Impact:	\$161,200

## Hall of Justice Court Requested Improvements

**Project Description:** This project will fund New York Unified Courts System (Courts) requested building modifications at the Hall of Justice. The County would act as the project manager/contractor for these modifications, and would pay for them from this capital fund. The Courts would reimburse the County for the expenses incurred while making the modifications, resulting in no additional expense to the County.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	10 years
Annual Debt Service Payment:	\$244,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$244,600</u>
Net Operating Budget Impact:	\$ 0

## Hall of Justice Reconstruction

**Project Description:** The Hall of Justice is over 40 years old and much of the infrastructure is in need of reconstruction. This project will fund various upgrades, such as improvements to building electrical, plumbing, steam, chilled water, HVAC, elevator, and security systems. Projects will also include interior renovations and reconfigurations to meet the functional needs of the building occupants.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	20 years
Annual Debt Service Payment:	\$213,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 64,080</u>
Net Operating Budget Impact:	\$149,520

## Asbestos Abatement

**Project Description:** This project will provide funds for identification, labeling, and abatement of asbestos materials in County facilities. Asbestos is a hazardous material when it is friable and airborne. In the past it was commonly used in building materials and is frequently encountered during building renovations, thus requiring abatement.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	10 years
Annual Debt Service Payment:	\$42,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$12,840</u>
Net Operating Budget Impact:	\$29,960

## Civic Center Complex Reconstruction

**Project Description:** This project will involve various improvements to the buildings at the Civic Center complex, which is approximately 40 years old. Improvements will include changes to benefit building operations, as well as upgrades to utilities, life safety and security systems. Also included is a substantial repair project which will remove/replace damaged concrete, repair any damaged structural steel, and replace failed expansion joints.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	20 years
Annual Debt Service Payment:	\$183,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 54,930</u>
Net Operating Budget Impact:	\$128,170

## Public Safety Building Reconstruction

**Project Description:** Many of the systems in the over 40 year old building are reaching the end of their useful life and need replacement. This project will fund reconstruction of various areas of the Public Safety Building and improvements to electrical, plumbing, steam, chilled water and security systems. Also included are changes to the building to make it suitable for the needs of the Sheriff's Department.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	20 years
Annual Debt Service Payment:	\$366,200
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$109,860</u>
Net Operating Budget Impact:	\$256,340

## County Office Building Reconstruction

**Project Description:** The County Office Building is over 100 years old and much of the infrastructure is in need of reconstruction. This project will fund improvements to electrical, plumbing, HVAC and security systems. Also included is remodeling and changes to the building structure and spaces.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	20 years
Annual Debt Service Payment:	\$219,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 65,910</u>
Net Operating Budget Impact:	\$153,790

## Energy Conservation and Management Systems

**Project Description:** This project will provide funds for upgrades and expansion of the energy management systems that control the heating, air-conditioning, and lighting equipment in County buildings. Project elements include upgrading to electronic controllers, replacement of building electric motors, installing energy efficient doors and windows, and upgrading of lighting systems.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	10 years
Annual Debt Service Payment:	\$57,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$17,130</u>
Net Operating Budget Impact:	\$39,970

## Roof Improvements

**Project Description:** This project provides funds for the replacement of roofs, skylights, roof drains, gutters, roofing masonry structure and decking reconstruction.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	10 years
Annual Debt Service Payment:	\$128,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 38,520</u>
Net Operating Budget Impact:	\$ 89,880

## ADA Aid to Disabled Improvements

**Project Description:** This project will implement the Americans with Disabilities Act (ADA) improvements to County buildings. Improvements include development of accessible parking spots, restroom accessibility, fire alarm system upgrades, entrance ramp construction, communications improvements, sign improvements, and replacement of doors and hardware to improve building accessibility.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	10 years
Annual Debt Service Payment:	\$21,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 6,420</u>
Net Operating Budget Impact:	\$14,980

# DEPARTMENT OF PARKS

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## HIGHLIGHTS OF CAPITAL PROGRAM

- Improvement of recreational facilities throughout the park system.
  - Construction of master plan improvements at existing parks stressing necessary health/safety improvements.
  - Rehabilitation of substandard restroom facilities and construction of new restrooms.
  - Handicapped access improvements.
  - Improvement of park facilities, which increase operating efficiency and reduce maintenance costs.
- 

The Monroe County Department of Parks is responsible for the operation and maintenance of approximately 11,600 acres of parkland throughout the County. The Department also maintains park buildings and recreational facilities, including picnic areas, trails, shelters and lodges, beach area, boat launches, a sensory memorial garden, arboretums, wetlands, sledding hills, ice skating rinks, a community center, ski slopes and play areas. It houses a zoological collection of over 400 animals. It maintains an extensive horticultural collection and arboretum. The Department cosponsors, with community organizations, a number of special attractions, such as the Highland Park Bowl, Ontario Performance Pavilion and programs at Springdale Farm, Seneca Park Zoo, Lambertton Conservatory, The Rochester Civic Garden Center, Landmark Society Olmsted Task Force, City of Rochester, Jack Tindale Inc., and the Ontario Beach Park Program Committee.



## Status of Previously Programmed Projects

### Projects Completed in 2010:

- Olmsted Lodge renovation
- Abraham Lincoln Park Improvements
- Oatka Creek Park playfields
- Black Creek Park Road and Parking Improvements
- Northampton Park Ski Hill Improvements

### Projects Nearing Completion:

- Shared Use Trails at Tryon Park and Irondequoit Bay Park West
- Black Creek Park Wetlands
- Rocky Coasts Exhibit Life Support Improvements
- Main Zoo Building Evaluation
- Design of Ellison Area Parks Master Plan Improvements
- Greece Canal Park Master Plan Improvements

### Other Projects Underway or Beginning:

- System-wide ADA Improvements
- Ellison Park Off Leash Dog Park
- Powder Mills Park Master Plan
- Africa Phase III
- Oatka Creek Park Master Plan
- Elephant Exhibit Design

**PARKS - 2012-2017**

PROJECT NAME		Budget	ANNUAL PROJECT COST					Total Cost 6 Years
		2012	2013	2014	2015	2016	2017	
Buildings and Structures	c	600,000	650,000	650,000	650,000	650,000	700,000	3,900,000
Utilities, Access and Site Improvements	c	750,000	650,000	650,000	650,000	650,000	700,000	4,050,000
Oatka Creek Park - Master Plan and Improvements	c	100,000						100,000
Powder Mills Park - Master Plan Improvements	c	150,000	1,000,000					1,150,000
Webster Park - Master Plan Improvements	c	1,000,000						1,000,000
Mendon Ponds Park - Master Plan Improvements	c			1,000,000				1,000,000
Churchville Park - Master Plan Improvements	c			150,000	1,000,000			1,150,000
Seneca Park - Master Plan Improvements	c				180,000	1,100,000		1,280,000
Highland Park - Master Plan Improvements	c					200,000	1,250,000	1,450,000
<i>Northampton Park - Master Plan Improvements</i>	<i>c</i>						185,000	185,000
<b>TOTAL</b>	<b>c</b>	<b>2,600,000</b>	<b>2,300,000</b>	<b>2,450,000</b>	<b>2,480,000</b>	<b>2,600,000</b>	<b>2,835,000</b>	<b>15,265,000</b>

Italics denotes a new project

**Buildings and Structures**

**Project Description:** This continuing project provides funds for: upgrading buildings and structures to provide handicapped access and use; meeting building and fire codes and other standards; major structural repairs and improvements to buildings such as new roofs, energy conservation improvements, heating and ventilation systems; construction of new support facilities such as storage barns, picnic facilities, playgrounds, restrooms, and shelters; and bridges and other structure construction and rehabilitation. Emphasis is on making improvements in the most heavily used parks and for projects involving public health and safety concerns, particularly restrooms and meeting ADA requirements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life: 15 years  
 Annual Debt Service Payment: \$401,600  
 Annual Operating Costs: \$- 37,000  
 Attributable Revenues: \$ 0  
 Net Operating Budget Impact: \$364,600

**Utilities, Access and Site Improvements**

**Project Description:** This project provides for reconstruction and improvements to roads, parking areas, walkways, bridges, patios, stairs and associated improvements such as lighting, grading and landscaping throughout the entire parks system. Improvements included in this program have been identified in various park master plans. Also provided for are: new/replacement energy efficient security lighting for roads, parking lots, related facilities and selected walkways; erosion protection measures for steep slopes/stream banks; drainage improvements to increase usability of recreation facilities; repair/replacement of main sewer, water, electric, gas, phone lines, septic systems, pump stations and pumps, and meters; new utility service lines on a site specific, as needed basis; and handicapped accessibility. The emphasis is to fund heavily used parks and for public health and safety concerns.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life: 15 years  
 Annual Debt Service Payment: \$401,600  
 Annual Operating Costs: \$ -35,000  
 Attributable Revenues: \$ 0  
 Net Operating Budget Impact: \$366,600

## Oatka Creek Park - Master Plan and Improvements

**Project Description:** This project involves the development of a park master plan, and the design and construction of Master Plan improvements at Oatka Creek Park. The master plan for the park will be completed before the first project is constructed. Projects will include: recreational facility improvements; building construction and rehabilitation; handicapped accessibility improvements; and utility system upgrades. Oatka Creek park comprises 461 acres, most of which was acquired over 25 years ago. Very few improvements have been undertaken since its acquisition, and there is a need to improve public access to the recreational opportunities in this park, due to increased use levels and the unique resources of the park.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$10,300
Annual Operating Costs:	\$20,400
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$30,700

## Powder Mills Park - Master Plan Improvements

**Project Description:** This project involves the design and construction of Master Plan improvements at Powder Mills Park. Projects will include: recreational facility improvements; building construction and rehabilitation; handicapped accessibility improvements; road, parking and trail improvements; and utility system upgrades. Powder Mills Park was initially developed in the 1930's and the park facilities and infrastructure are in need of upgrading to protect the County investment in this popular park. The Master Plan will identify and set priorities for project implementation.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$118,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$118,400

## Webster Park - Master Plan Improvements

**Project Description:** This program provides for design and construction of several recommendations of the Park's master plan. These involve: waterfront improvements; campground improvements; security lighting; general building and recreation facility improvements; improve trails and handicapped accessibility throughout the park and its facilities; improve road and parking areas; forest management plan; landscaping and grading; and a sign system. These projects bring the park up to current standards, improve health and safety of park users and reduce operations and maintenance costs.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$103,000
Annual Operating Costs:	\$ -10,000
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$ 93,000

## Mendon Ponds Park - Master Plan Improvements

**Project Description:** This project implements Park Master Plan recommendations. These are: (1) improving handicapped accessibility; (2) developing a sign system; (3) road, parking and trail improvements; (4) building construction and rehabilitation; (5) recreational facility improvements; and (6) utility system upgrades. Improvements will address health and safety problems, make the park more accessible to the handicapped, protect significant natural features, and reduce operations and maintenance costs.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$103,000
Annual Operating Costs:	\$ -10,000
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$ 93,000

## Churchville Park - Master Plan Improvements

**Project Description:** This project involves the design and construction of Master Plan improvements at Churchville Park. Projects include road and utility construction, new buildings and rehabilitation, recreation facility improvements, trail construction, and landscaping. Churchville Park was initially developed in the 1930's and the park facilities and infrastructure need upgrading to protect the County investment in this important park.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$118,400
Annual Operating Costs:	\$ -8,000
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$110,400

## Seneca Park - Master Plan Improvements

**Project Description:** These funds begin to implement recommendations in the park master plan. Projects include: improve handicapped accessibility; rehabilitate trails and other facilities; provide signs and install security lighting; reconstruct roads and parking lots; construct new buildings and rehabilitate existing structures; and restore historic landscape design throughout the park.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$131,800
Annual Operating Costs:	\$ 10,000
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$141,800

## Highland Park - Master Plan Improvements

**Project Description:** This project involves the design and construction of Master Plan Improvements at Highland Park. Improvements include new and rehabilitated pathways, tree and shrub collection improvements, road and parking construction, building construction and rehabilitation, handicapped access, and infrastructure upgrades.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$149,300
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$149,300

## Northampton Park - Master Plan Improvements

**Project Description:** This project involves the design of Master Plan improvements at Northampton Park. Projects will include: building construction and rehabilitation; road, parking and trail improvements; recreational facility improvements; handicapped accessibility improvements; and utility system upgrades. Northampton Park has experienced significant increased use and demands for recreational use from the community. Implementation of master plan recommendations will address these park and recreation services demands.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$19,000
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$19,000

# DEPARTMENT OF TRANSPORTATION HIGHWAYS AND BRIDGES

## HIGHLIGHTS OF CAPITAL PROGRAM

- Resurface approximately 210 lane miles of County highways.
- Reconstruct/rehabilitate approximately 33 lane miles of County highways.
- Reconstruct/rehabilitate approximately 5 lane miles of City highways.
- Rehabilitate and reconstruct 9 County Bridges.
- Preventative Maintenance of 7 County Bridges.
- Rehabilitate and reconstruct approximately 22 County culverts.



**The Highway Engineering and Operations Division** is responsible for engineering, construction and operations of approximately 663 centerline miles (1,493 lane miles) of highways. These highways range from four and five lane urban arterials to two lane rural roads. When major highway improvements are undertaken, the County performs the planning function, design, construction supervision and project management through the use of the Department of Transportation staff and consultant engineering services. All major construction projects are contracted to private construction firms through the public bidding process.

In accordance with section 131-k of the State Highway Law, the County has undertaken a program to fund reconstruction of certain City streets that function as arterials. In projects of this type, County funds may be used only for engineering design, construction inspection, and for actual costs of construction of highway elements. Utility displacement, sidewalks and right-of-way costs must be borne by the City.

### Status of Previously Programmed Highway Projects:

**Projects that will be completed or under construction in 2011 include:** Mill Road II, Jefferson Avenue, Paul Road/Fisher Road Corridor, Dorsey Road, Highway Preventative Maintenance I Project, Lyell Avenue, Jackson Road/Stone Road and Culver Road.

**Projects that are currently in planning or design and will begin construction in 2012, or later, include:** East Ridge Road, John Street Ext., Preventative Maintenance II, Long Pond Road V, Westfall Road III, Lincoln Road, Portland Avenue, and Erie Station Road.

**The Bridge Engineering and Operations Division** is responsible for engineering, inspection, operation, and maintenance of 176 bridges and 276 major culverts on the County's highway system. It is also responsible, via an agreement with the NYSDOT, for the operation and maintenance of the Colonel Patrick H. O'Rorke Memorial Bridge. Specific bridges have been chosen for the capital program through an inventory of all county bridges compiled from detailed biennial inspection reports prepared by both the County and State engineers. All bridges are condition rated on a Statewide and Federal rating system. These ratings are the key elements used in prioritizing and programming bridges for capital improvements.

Typically these structures have existed well beyond their projected useful lives and, if not maintained, rehabilitated or reconstructed, may receive some restrictions. Structural restrictions are caused by deterioration, outdated design capacity, narrow pavement width, hydraulic inadequacies, obsolete and unsafe railing system and parapets.

Specific culverts have been chosen for capital improvements solely through inventory and inspection efforts of County staff. A condition rating system similar to that used for bridges is used to prioritize and program culverts for capital improvements.

### Status of Previously Programmed Bridge Projects:

**Bridge projects completed or under construction in 2011 include:** bridges on: Union Street over Oatka Creek, Lawrence Road, Peck Road, Edgemere Drive, Union Street over Black Creek, and culverts on Honeoye Falls No. 6 Road, Salt Road and Stottle Road.

**Projects that are currently in planning or design and will begin construction in 2012 or later include:** Kirk Road Bridge, Klem Road Bridge, Penfield Road Bridge, Twin Bridge Road Bridge, Burnt Mill Road Bridge, Edgewood Avenue Bridge, Long Pond Road Bridge, Redman Road culvert and Salt Road culvert.

**HIGHWAYS AND BRIDGES - 2012-2017**

PROJECT NAME		Budget	ANNUAL			PROJECT	COST		Total Cost 6 Years
		2012	2013	2014	2015	2016	2017		
Milling/Resurfacing/Recycling	c	2,400,000	2,700,000	2,900,000	3,100,000	3,200,000	3,200,000	17,500,000	
Culvert Replacement Program	c	1,000,000	1,200,000	1,300,000	1,400,000	1,600,000	1,700,000	8,200,000	
Burnt Mill Rd. Bridge over Black Creek (PM) (3317300	c	17,000						17,000	
	s	52,000						52,000	
	f	278,000						278,000	
total		347,000	0	0	0	0	0	347,000	
South Avenue - Elmwood Ave/Bellvue Dr & Elmwood Ave.: Mt. Hope/South Ave (City)	c	1,000,000	1,000,000	1,100,000	1,200,000	68,000		4,368,000	
Portland Avenue - Titus Avenue to City Line	c	1,626,000						1,626,000	
	s	378,000						378,000	
	f	2,016,000						2,016,000	
total		4,020,000	0	0	0	0	0	4,020,000	
Highway Rehabilitation Program	c	200,000	2,445,000	3,510,000	2,690,000	2,400,000	2,800,000	14,045,000	
Lincoln Road - Commercial St./Route 31F	c	167,000						167,000	
	s	503,000						503,000	
	f	2,680,000						2,680,000	
total		3,350,000	0	0	0	0	0	3,350,000	
Klem Rd Bridge over Mill Creek Tributary 3368070	c	53,000						53,000	
	s	160,000						160,000	
	f	854,000						854,000	
total		1,067,000	0	0	0	0	0	1,067,000	
Penfield Rd Bridge Rehab. Over Irondequoit Creek 1048530	c	44,000						44,000	
	s	132,000						132,000	
	f	706,000						706,000	
total		882,000	0	0	0	0	0	882,000	
Coldwater Road over Little Black Creek (1043310)	c	9,000		40,000				49,000	
	s	29,000		122,000				151,000	
	f	152,000		649,000				801,000	
total		190,000	0	811,000	0	0	0	1,001,000	
Edgewood Ave. Bridge over Allen Creek 3317400	c		51,000					51,000	
	s		154,000					154,000	
	f		821,000					821,000	
total		0	1,026,000	0	0	0	0	1,026,000	
Long Pond Rd. Bridge Over Round Pond Creek 3369710	c		29,000					29,000	
	s		88,000					88,000	
	f		468,000					468,000	
total		0	585,000	0	0	0	0	585,000	
Erie Station Rd-W Henrietta Rd. to Middle Road	c		4,000		150,000			154,000	
	s		13,000		450,000			463,000	
	f		67,000		2,400,000			2,467,000	
total		0	84,000	0	3,000,000	0	0	3,084,000	
Twin Bridge Road Bridge over Oatka Creek 3317380	c		79,000					79,000	
	s		236,000					236,000	
	f		1,259,000					1,259,000	
total		0	1,574,000	0	0	0	0	1,574,000	
Phillips Road - Schlegel Road to Lake Road	c		950,000			4,000,000	2,400,000	7,350,000	
Stone Road - Mt. Read Blvd. To Lynette Drive	c		27,000	8,000	199,000			234,000	
	s		81,000	24,000	599,000			704,000	
	f		433,000	128,000	3,192,000			3,753,000	
total		0	541,000	160,000	3,990,000	0	0	4,691,000	

Italics denotes a new project

**HIGHWAYS AND BRIDGES - 2012-2017**

PROJECT NAME	Budget	ANNUAL			PROJECT	COST		Total Cost 6 Years
	2012	2013	2014	2015	2016	2017		
Sibley Rd Br Rehab over Honeoye Creek 3317750	c		10,000		42,000			52,000
	s		29,000		126,000			155,000
	f		156,000		671,000			827,000
<b>total</b>		0	195,000	0	839,000	0	0	1,034,000
Bridge Preventive Maintenance	c		18,000	133,000				151,000
	s		51,000	401,000				452,000
	f		274,000	2,138,000				2,412,000
<b>total</b>		0	343,000	2,672,000	0	0	0	3,015,000
Whitney Road - Turk Hill Road to Howell Road	c			60,000	15,000	230,000	230,000	535,000
	s			180,000	47,000	690,000	690,000	1,607,000
	f			958,000	248,000	3,680,000	3,680,000	8,566,000
<b>total</b>		0	0	1,198,000	310,000	4,600,000	4,600,000	10,708,000
Bowerman Road Bridge over Oatka Creek 3359090	c				400,000		2,212,000	2,612,000
Rustic Railing Replacement Project	c				100,000	450,000		550,000
Park Rd. Bridge over Irondequoit Creek 3317860	c					250,000		250,000
Moscow Rd Bridge over Yanty Creek 3317110	c					350,000		350,000
Goodman Street - Bay Street to Clifford (City)	c					1,132,000	1,200,000	2,332,000
<i>Taylor Rd Bridge Over Irondequoit Creek 3317720</i>	<i>c</i>						275,000	275,000
c = county funds		6,516,000	8,513,000	9,051,000	9,296,000	13,680,000	14,017,000	61,073,000
s = state funds		1,254,000	652,000	727,000	1,222,000	690,000	690,000	5,235,000
f = federal funds		6,686,000	3,478,000	3,873,000	6,511,000	3,680,000	3,680,000	27,908,000
<b>TOTAL</b>		14,456,000	12,643,000	13,651,000	17,029,000	18,050,000	18,387,000	94,216,000

Italics denotes a new project

**Milling/Resurfacing/Recycling**

**Project Description:** This is an annual program to improve various county highways. Projects in this program are designed to restore deteriorating highways by improving the drainage, edge treatments, shoulders and roadway condition. This program will improve arterial and collector highways in the county and extend the useful life of the roads before major reconstruction is needed. The projects will improve traffic safety and operating conditions on these highways.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	15 years
Annual Debt Service Payment:	\$1,801,800
Annual Operating Costs:	\$- 435,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$1,366,800

**Culvert Replacement Program**

**Project Description:** This program is designed to replace deteriorated and inadequate culverts on the county highway system. An inventory is updated each year and the highest priority culverts are scheduled in the program. Replacement of these culverts will improve traffic safety by eliminating the structural, as well as geometric and functional hazards such as headwalls located at the edge of the pavement and, the possibility of upstream and downstream flooding.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	15 years
Annual Debt Service Payment:	\$ 844,300
Annual Operating Costs:	\$-100,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ 744,300

## Burnt Mill Road Bridge over Black Creek (PM) (3317300)

**Project Description:** Projects in this program are designed to restore deteriorating bridges by addressing critical elements on the structures which have deteriorated to a condition where they should be addressed. This program will extend the useful life of these structures before major rehabilitation is needed. This project will provide funds for Preventive Maintenance (PM) of the Burnt Mill Road Bridge (3317300) Over Black Creek, in the town of Riga. Originally built in 1932, this 78 year old structure's life expectancy can be extended by this project. The 2008 NYSDOT inspection gives this structure a condition rating of 4.857, with a Federal Sufficiency Rating of 42.1, indicating deterioration. Since the CIP program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$ 2,300
Annual Operating Costs:	\$ -18,200
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ -15,900

## South Avenue: Elmwood/Bellvue & Elmwood Ave: Mt. Hope/South (City)

**Project Description:** This project involves the reconstruction of the roadway; installation of curbs, sidewalks, landscaping and street lighting; and drainage and water improvements. This road is an arterial highway in the City of Rochester and is eligible for county funding under section 131-k of the Highway Law. Adequate bicycle space will be designed into the planned improvements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$449,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$449,700

## Portland Avenue - Titus Avenue to City Line

**Project Description:** This project involves the reconstruction of Portland Avenue to include improved drainage, catch basins, rehabilitation and/or replacement of the riding surface and curbs. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2009 Pavement Quality Index (scale 0-100; worst to best) for this road is 32.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$167,400
Annual Operating Costs:	\$ -60,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$107,400

## Highway Rehabilitation Program

**Project Description:** This project is designed to restore deteriorating highways by improving the drainage, edge treatments, shoulders and roadway condition. This program will improve roads in the county and extend the useful life of the roads before major reconstruction is needed. The projects will improve traffic safety, drainage and operating conditions on these highways. The roads in this program currently include: Pinnacle Road (Rte 251 to Thruway), Long Pond Road (Lake Ontario State Parkway to Edgemere Drive), Kuhn Road (Flynn Road to Long Pond Road) and Mendon Center Road (Canfield Road to Calkins Road).

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$1,446,100
Annual Operating Costs:	\$ -75,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$1,371,100

## Lincoln Road - Commercial St./Route 31F

**Project Description:** This project involves the reconstruction of Lincoln Road to include improved drainage, catch basins, replacement of the base and riding surface, gutters/curbs and paved shoulders. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2009 Pavement Quality Index (scale 0-100; worst to best) for this road is 36.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$ 17,200
Annual Operating Costs:	\$-19,500
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ -2,300

## Klem Road Bridge over Mill Creek Tributary (3368070)

**Project Description:** This project will provide funds for replacement of Klem Road Bridge over Mill Creek Tributary, in the town of Webster (3368070). Originally built in 1971, this 39 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 3.571, with a Federal Sufficiency Rating of 15.7, indicating deterioration. Since the CIP bridge replacement program is intended to replace deteriorated structures on the County Highway System, the bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 4,600
Annual Operating Costs:	\$ -47,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ -42,400

## Penfield Road Bridge Rehab. over Irondequoit Creek (1048530)

**Project Description:** This project will provide funds for rehabilitation of Penfield Road Bridge over Irondequoit Creek, in the town of Penfield (BIN 1048530). Originally built in 1928, this 82 year old structure will need major rehabilitation to extend its useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.188, with a Federal Sufficiency Rating of 62.3, indicating deterioration. Since the CIP bridge program is intended to rehabilitate or replace deteriorated structures, on the County Highway System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 3,800
Annual Operating Costs:	\$ -41,840
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ -38,040

## Coldwater Road over Little Black Creek (1043310)

**Project Description:** This project will provide funds for replacement of the Coldwater Road Bridge over Little Black Creek, in the town of Chili (1043310). Originally built in 1920, this 90 year old single span concrete drop beam - through girder structure has outlasted its design useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.756, with a Federal Sufficiency Rating of 31.3, indicating significant deterioration. Since the CIP bridge program is intended to replace or rehabilitate deteriorated structures on Monroe County System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$4,300
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$4,300

## Edgewood Ave. Bridge over Allen Creek (3317400)

**Project Description:** This project will provide funds for replacement of Edgewood Avenue Bridge over Allen Creek, in the town of Brighton (BIN 3317400). Originally built in 1953, this 57 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.690, with a Federal Sufficiency Rating of 51.1, indicating deterioration. Since the CIP bridge replacement program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 4,400
Annual Operating Costs:	\$ -42,840
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$ -38,440

## Long Pond Road Bridge over Round Pond Creek (3369710)

**Project Description:** This project will provide funds for rehabilitation of Long Pond Road Bridge over Round Pond Creek, in the town of Greece (BIN 3369710). Originally built in 1965, this 45 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 5.091, with a Federal Sufficiency Rating of 40.7, indicating deterioration. Since the CIP bridge replacement program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 2,500
Annual Operating Costs:	\$ -24,400
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$ -21,900

## Erie Station Rd. - W. Henrietta Rd. to Middle Road

**Project Description:** This project involves the reconstruction of Erie Station Road to include improved drainage, catch basins, replacement of the base and riding surface, curbs and paved shoulders. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2009 Pavement Quality Index (scale 0-100; worst to best) for this road is 49.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$ 15,900
Annual Operating Costs:	\$ -22,500
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$ -6,600

## Twin Bridge Road Bridge over Oatka Creek (3317380)

**Project Description:** This project will provide funds for replacement of Twin Bridge Road bridges over Oatka Creek, in the town of Wheatland. The North bridge (BIN 3317380), Originally built in 1929, this 81 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 3.653, with a Federal Sufficiency Rating of 21.3, indicating deterioration. The South bridge (BIN 3317370), rehabilitated in 1973, this 36 year improvement has served its purpose. The 2008 NYSDOT inspection gives this structure a condition rating of 4.250, with a Federal Sufficiency Rating of 64.6, indicating deterioration.. Because of the close proximity of the two bridges, a thorough hydraulic analysis will be performed during design, to determine whether the south bridge can be completely removed or possibly replaced with a much smaller pipe structure. Furthermore, utilizing the same hydraulic analysis will determine the appropriate size of the north bridge replacement, to accommodate the flows for both structures. A thorough planning study will determine first, if both bridges can be completely removed without replacement. Since the CIP bridge replacement program is intended to replace deteriorated structures on the County Highway System, the bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 6,900
Annual Operating Costs:	\$ -69,440
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$ -62,540

## Phillips Road - Schlegel Road to Lake Road

**Project Description:** This project involves the reconstruction of Phillips Road to include improved drainage, catch basins, replacement of the base and riding surface, gutters/curbs and paved shoulders. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2009 Pavement Quality Index (scale 0-100; worst to best) for this road is 56.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$756,800
Annual Operating Costs:	\$ -52,500
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$704,300

## Stone Road - Mt Read Blvd. to Lynette Drive

**Project Description:** This project involves the reconstruction of Stone Road to include improved drainage, catch basins, replacement of the base and riding surface, gutters/curbs and paved shoulders. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2009 Pavement Quality Index (scale 0-100; worst to best) for this road is 47.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$ 24,100
Annual Operating Costs:	\$-24,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ 100

## Sibley Road Bridge over Honeoye Creek (3317750)

**Project Description:** This project will provide funds for rehabilitation of Sibley Road Bridge over Honeoye Creek, in the town of Mendon (BIN 3317750). Originally built in 1962, this 48 year old structure will need a major rehabilitation to extend its useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.767, with a Federal Sufficiency Rating of 64.1, indicating deterioration. Since the CIP bridge program is intended to rehabilitate or replace deteriorated structures, on the County Highway System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 4,500
Annual Operating Costs:	\$ -45,200
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ -40,700

## Bridge Preventive Maintenance

**Project Description:** Projects in this program are designed to maintain, and prevent from deterioration, various bridges in Monroe County by painting and addressing deck elements. This program is intended to keep up with the cyclic preventive maintenance painting and sealing of the newer County Bridges in order to extend their service life and protect them from premature deterioration. The bridges include: Clarkson-Parma Townline Road over Otis Creek (3317780); Edgemere Drive over Buck Pond Outlet (3317570); Lake Road West Fork over Sandy Creek (3317630); North Greece Road over Northrup Creek (3317520); North Hamlin Road over Sandy Creek (3317640); Wheatland Center Road over Oatka Creek (3317920); Winton Road over Erie Canal (4443090).

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$13,200
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$13,200

## Whitney Road - Turk Hill Road to Howell Road

**Project Description:** This project involves the reconstruction of Whitney Road to include improved drainage, catch basins, replacement of the base and riding surface, gutters/curbs and paved shoulders. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2009 Pavement Quality Index (scale 0-100; worst to best) for this road is 42.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$ 55,100
Annual Operating Costs:	\$-60,000
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$- 4,900

## Bowerman Road Bridge over Oatka Creek (3359090)

**Project Description:** This project will provide funds for replacement of Bowerman Road Bridge over Oatka Creek, in the town of Wheatland (BIN 3359090). Originally built in 1948, this 62 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection report gives this structure a condition rating of 4.681, with a Federal Sufficiency Rating of 42.8, indicating deterioration. Since the CIP bridge program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 227,700
Annual Operating Costs:	\$-112,000
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$ 115,700

## Rustic Railing Replacement Project

**Project Description:** There are rustic railings installed at over a dozen locations throughout the County, for various design and aesthetic reasons. These systems range from 4 to 28 years in age and were installed at locations where the public demand required a more aesthetically blending system with their surroundings. These railings, although aesthetically appealing to some neighborhoods, have been deemed prone to premature deterioration and breakdown of the protective coating, in moist environments (such as road sides where they are now installed). The material tends to deteriorate from inside out, making it difficult to visually inspect, while compromising the system's integrity and safety from within. In 2007, NYSDOT issued an engineering bulletin requiring all rustic railings, within the State, to be replaced with conventional galvanized railing, no later than ten years from the issuance of the mandate. We are required to meet this requirement by 2017.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$56,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$56,600

## Park Rd. Bridge over Irondequoit Creek (3317860)

**Project Description:** This project will provide funds for replacement of Park Road Bridge over Irondequoit Creek, in the town of Perinton (Bin 3317860). Originally built in 1957, this 53 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.800, with a Federal Sufficiency Rating of 73.2, indicating deterioration. Since the CIP bridge replacement program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 21,800
Annual Operating Costs:	\$-42,440
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$-20,640

## Moscow Road Bridge over Yanty Creek (3317110)

**Project Description:** This project will provide funds for replacement of Moscow Road Bridge over Yanty Creek, in the town of Hamlin (3317110). Originally built in 1932, this 78 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.347, with a Federal Sufficiency Rating of 73.1, indicating deterioration. Since the CIP bridge program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 30,500
Annual Operating Costs:	\$-62,640
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$-32,140

## Taylor Road Bridge over Irondequoit Creek (3317720)

**Project Description:** This project will provide funds for replacement of Taylor Road Bridge over Irondequoit Creek, in the town of Mendon (Bin 3317720). Originally built in 1950, this 60 year old structure is approaching the end of its useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.517, with a Federal Sufficiency Rating of 76.9, indicating deterioration. Since the CIP bridge replacement program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$24,000
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$24,000

## Goodman Street - Bay Street to Clifford (City)

**Project Description:** This project involves the reconstruction of the roadway; installation of curbs, sidewalks, landscaping and street lighting; and drainage and water improvements. This road is an arterial highway in the City of Rochester and is eligible for county funding under section 131-k of the Highway Law. Adequate bicycle space will be designed into the planned improvements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$240,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$240,100

# DEPARTMENT OF TRANSPORTATION -- TRAFFIC ENGINEERING

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## HIGHLIGHTS OF CAPITAL PROGRAM

- Provides for the upgrading and replacement of existing traffic signals and expressway lighting, installation of new traffic signals, expansion of the intelligent transportation system, and expansion of the computerized signal system for the City, towns and villages of Monroe County;
- Undertake spot improvements at accident, traffic congestion and problem locations in Monroe County;
- Replace and upgrade traffic signs to bring them up to today's standards and improve safety for motorists;
- Rehabilitate and improve the Regional Traffic Operations Center to maintain operations at this critical facility.



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**Various Department of Transportation Divisions** are responsible for all the County's traffic engineering needs such as: traffic analysis and design; the computerized traffic control system; signal maintenance; highway lighting; highway spot safety improvement program; and City traffic features needs. These Divisions identify prospects for spot improvements and traffic engineering improvements.

### Status of Previously Programmed Projects

**Projects that will be completed, or under construction, in 2011 include:** Traffic Engineering – (upgrading the County's signal system and expressway lighting infrastructure, expanding the computerized signal system and Intelligent Transportation Systems); Communication Conduit construction; Safe Routes to Schools (traffic control devices upgrade); City Traffic Features; Phase III of the Intelligent Transportation Systems (which includes expansion of the traffic signal and traffic camera systems); Spot Improvements to shoulders on County highways ; and, Traffic Sign Retroreflectivity Upgrade.

**Projects that are currently in planning or design phase and should be under construction in 2012 or later include:** Spot improvements: shoulder and vertical curve improvements to County roads; City Traffic Features; Traffic Engineering: continue to upgrade the County's signal system and expressway lighting infrastructure, expand the computerized signal system expansion using fiber optic cable and Traffic Sign Retroreflectivity Upgrade.

**TRAFFIC ENGINEERING - 2012-2017**

PROJECT NAME		Budget	ANNUAL PROJECT COST				Total Cost 6 Years	
		2012	2013	2014	2015	2016		2017
Traffic Engineering	c	400,000	500,000	600,000	750,000	850,000	850,000	3,950,000
Spot Improvement Projects	c	500,000	500,000	500,000	500,000	600,000	600,000	3,200,000
City of Rochester Traffic Features	c	400,000	400,000	400,000	400,000	400,000	400,000	2,400,000
Traffic Sign Retroreflectivity Upgrade	c	400,000	400,000	400,000	400,000	400,000	400,000	2,400,000
Regional Traffic Operations Center Rehabilitation	c				300,000	300,000		600,000
TOTAL c		1,700,000	1,800,000	1,900,000	2,350,000	2,550,000	2,250,000	12,550,000

**Spot Improvement Projects**

**Project Description:** This is a multi-year program designed to provide improvements to county highways that may have identified safety and/or traffic congestion problems along road sections or at county intersections. These locations have been identified as areas where the accident rate may be higher than the County average or where traffic congestion exists due to continued growth. Additionally, this program will provide adequate paved space for: other modes of transportation i.e.. pedestrians/bicyclists, for a recovery area to regain control of a vehicle or provide structural support to the roadway pavement. Improvements may include but are not limited to the cutting and filling of hills and the installation of turn lanes, shoulders and traffic control devices.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	15 years
Annual Debt Service Payment:	\$329,500
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$329,500

**City of Rochester Traffic Features**

**Project Description:** This project provides funding to reimburse the City for traffic engineering costs associated with those City-initiated highway projects exclusive of 131-k projects. The County of Monroe is responsible for the signal system, pavement markings, and traffic signs on highways in the City of Rochester. There is an obligation to provide traffic-engineering services to the City and this project will provide a mechanism for identifying traffic-engineering costs for specific City projects. This program funds the replacement and upgrading of problem signalized intersections and installation of signs and pavement markings for traffic control for projects undertaken by the City of Rochester through their capital improvement program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	10 years
Annual Debt Service Payment:	\$326,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$326,100

**Traffic Engineering**

**Project Description:** This is a multi-year program designed to provide for the upgrading, expansion and replacement of existing traffic signal and roadway lighting facilities. Tasks include the replacement/upgrades of existing equipment (such as traffic signal and lighting systems controls), installation of new signals and flashers where they are justified, and the expansion of the County's computerized traffic control systems (for improved highway signal system performance).

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	5 years
Annual Debt Service Payment:	\$937,700
Annual Operating Costs:	\$ -20,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$917,700

## Traffic Sign Retroreflectivity Upgrade

**Project Description:** This project will replace and upgrade traffic signs on County/City roads that do not meet the minimum retroreflectivity standards or letter size as set forth by the Federal Highway Administration's (FHWA) Manual of Uniform Traffic Control Devices (MUTCD) . By replacing signs that are identified not to meet the minimum standards with signs that do, the County's and City's road system will become safer by reducing the collisions that are associated with poor sign visibility and in turn, incur less liability. Due to the recent adoption of newer standards by the Federal Highway Administration's (FHWA) Manual of Uniform Traffic Control Devices (MUTCD), we are mandated to provide brighter signs for nighttime viewing that will benefit all drivers and in particular seniors, which are a growing segment of our population. This project will comply with that mandate.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$326,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$326,100

## RTOC Rehabilitation

**Project Description:** This project provides funds for rehabilitation and improvements to the Regional Traffic Operations Center (RTOC) to maintain the operations of the computerized signal system, the County's and NYSDOT's signal operations and the New York State Police. Improvements include roof replacement, HVAC upgrades, parking lot repaving/resurfacing, sidewalks, plumbing upgrades and other building/facility upgrades as required.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$61,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$61,800

# MONROE COUNTY WATER AUTHORITY

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## HIGHLIGHTS OF CAPITAL PROGRAM

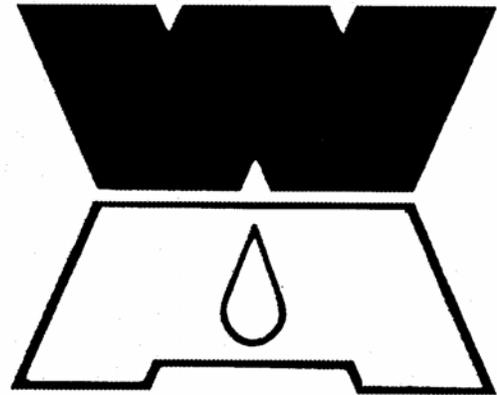
Continue with prudent infrastructure renewals and replacements in order to economically achieve a safe, secure and reliable water supply system for the community.

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The Monroe County Water Authority is the largest water supplier in the region, furnishing water to over 650,000 people in the region through 170,000 services on a retail or direct basis and 20,000 services on a wholesale basis. The Water Authority serves Monroe County and portions of each of the surrounding counties. The City of Rochester and the Village of Webster still operate their own water production facilities; however, the City and the Water Authority have an exchange agreement whereby each obtains substantial quantities of water from the other and the Water Authority also serves a portion of the Village of Webster.

Due to the size of the Water Authority's operation, substantial economies of scale are being realized in meeting the Region's increasing public water supply requirements. This scale allows for increased effectiveness in the production, transmission and storage of our water resources. The objective of using Lake Ontario as the principal source of supply allows the Authority to enjoy a relatively unlimited supply of high quality raw water, thereby, avoiding the water quality problems that have been experienced by many smaller public suppliers in the region.

The Water Authority's asset management planning focuses on timely renewals and replacements of the water supply infrastructure such that the economic life of these assets is maximized and the high degree of reliability demanded by the residential, commercial and industrial customers is achieved.



## Status of Previously Programmed Projects

The following projects were completed or underway during the passed year:

- Hydrant, valve and meter replacement candidates have been prioritized and replacement work is on-going.
- The storage Tank Rehabilitation is underway.
- Planning, permitting and design development work for Cement Lining and Water Main Rehabilitation was completed and construction contracts were implemented.

## WATER AUTHORITY - 2012-2017

PROJECT NAME		ANNUAL PROJECT COST						Total Cost 6 Years
		Budget 2012	2013	2014	2015	2016	2017	
Hydrant Replacement Program	d	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
Valve Replacement Program	d	170,000	170,000	170,000	170,000	170,000	170,000	1,020,000
Residential Meter Replacement & Upgrade Program	d	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	7,200,000
Large Meter Replacement and Upgrade Program	d	320,000	340,000	355,000	370,000	380,000	380,000	2,145,000
Storage Facilities Rehabilitation	d	1,750,000	2,100,000	1,700,000	1,750,000	1,100,000	1,100,000	9,500,000
Cement Lining Water Main Rehabilitation	d	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	9,000,000
TOTAL d		5,240,000	5,610,000	5,225,000	5,290,000	4,650,000	4,650,000	30,665,000

## Hydrant Replacement Program

**Project Description:** The hydrant replacement program is for the systematic, system wide replacement of older, leaking, or damaged hydrants. Hydrants are replaced based upon maintenance inspections, leak detection testing, and damage as a result of vehicular accidents. In order to keep the required fire protection throughout the water system, older, outdated and damaged hydrants have to be replaced on a regular schedule.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$156,900
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$156,900</u>
Net Operating Budget Impact:	\$ 0

## Valve Replacement Program

**Project Description:** Based on on-going inspection and problems discovered in operating the system, valves are selected for replacement or additional valves are installed. Properly functioning valves are essential for the daily operation and maintenance of the water system, and for rapid usage during emergency situations.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$138,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$138,600</u>
Net Operating Budget Impact:	\$ 0

## Residential Meter Replacement and Upgrade Program

**Project Description:** The Water Authority policy is to replace residential meters on a 25 year cycle. The meter replacement program ensures optimum revenue through accurate registration of residential water consumption. The new meters installed will be read using radio frequency from the public street outside of the residence, and will report leakage, vacancy, and reverse flow incidents automatically. Access to the residence will not be needed.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$741,300
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$741,300</u>
Net Operating Budget Impact:	\$ 0

## Large Meter Replacement and Upgrade Program

**Project Description:** The Water Authority has a continuous meter maintenance program for large meters that ensures optimum revenue through accurate registration of water consumption. Large meters installed in industrial and school settings will use radio reading meters to minimize time spent gaining access through security stations to obtain monthly meter readings. The project benefits both the customer and Water Authority by working towards the goal of accurate registration of water consumed by the largest customers and provides for accurate billings and revenue receivables.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$187,000
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$187,000</u>
Net Operating Budget Impact:	\$ 0

## Storage Facilities Rehabilitation

**Project Description:** This is a long-term annual program to secure, upgrade, repair, and paint tanks in the Authority's production and distribution systems. There are currently 44 potable water storage tanks in the system, of which 33 are steel and the remainder concrete. The expected life of the paint coating systems ranges from 15-25 years, depending on conditions and existing coating systems.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$828,300
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$828,300</u>
Net Operating Budget Impact:	\$ 0

## Cement Lining Water Main Rehabilitation

**Project Description:** This is a long-term multi-year program for rehabilitation of old cast iron pipelines in the Authority's system with a target of cleaning and lining approximately 5 miles of water main per year. Cleaning and lining improves chlorine residual retention and reduces dirty water complaints. The lining process also provides increased hydraulic capacity in the vicinity of the lining project, and reduces internal corrosion, which has advantages over direct replacement and additionally is less disruptive to the community.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### **Estimated Annual Impact on the Operating Budget:**

Bond Life:	20 years
Annual Debt Service Payment:	\$784,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$784,700</u>
Net Operating Budget Impact:	\$ 0